

PHILLIPS et al.
Appl. No. 10/551,698
Atty. Ref.: 620-393
Amendment After Final Rejection
June 7, 2011

REMARKS

Reconsideration is requested.

Claims 1-30 are pending. Claims 16 and 25 have been canceled, without prejudice. The claims have been amended, without prejudice. Support for the claim revisions may be found throughout the specification, such as on page 5, lines 11-14 and page 25, line 33 through page 26, line 7 of the specification. Claims 1-15, 17-24 and 26-30 will be pending upon entry of the present Amendment.

The Examiner's acknowledgement of the obvious typographical error in the remarks of the Amendment filed January 24, 2011 (i.e., "Shakesheff does contain all the features of the claimed tissue growth guides") is noted with appreciation. The whole of the remarks of record will be appreciated to note numerous features of the claims not found in the cited art. To the extent the Examiner relies on the applicants "admission" in this regard, reconsideration is requested.

Claim 15 has been amended in response to the Examiner's objection to the same. Entry of the amendment and withdrawal of the objection are requested.

The Section 102 rejection of claims 1-8, 10-12 and 14 over Shakesheff (WO 02/47557) is traversed. Reconsideration and withdrawal of the rejection are requested in view of the above and the following comments.

The cited art fails to teach or suggest a tissue growth guide of the claims containing a biopolymer matrix seeded with cells. The lumen of the regeneration conduit of the cited art is understood to be filled with a hydrogel, such as collagen,

without seeded cells. Moreover, to the extent Shakesheff may be considered to contain an inner core (such as perhaps the hydrogel) and an outer sheath (such as perhaps the glass capillaries), the core is in continuous contact with the sheath along the length of the conduit. Such a core and sheath of the cited art are not tethered in a manner required by the presently claimed invention. Moreover, to the extent that the inner core of Shakesheff may be considered to contain a neurite, a "neurite" is not a "cell", such as an undifferentiated or developing neuron, as alleged by the Examiner. The applicants submit, with due respect, that a neurite is a projection from the cell body of a neuron (i.e. either an axon or a dendrite). It is respectfully submitted that confusion as to the meaning of the term "neurite" may have arisen because the term is often used to describe projections from the cell body of immature or developing neurons, because, in these cells it is difficult to tell whether a projection is an axon or a dendrite.

The cited art fails to teach each and every aspect of the claimed invention. Withdrawal of the Section 102 rejection of claims 1-8, 10-12 and 14 over Shakesheff is requested.

The Section 103 rejection of claims 1-21 and 23-25 over Kadiyala (U.S. Patent No. 6,174,333), Shakesheff (WO 02/47557) and Chen (2000, Biomaterials, Vol. 21, pp 1541-1547) is traversed. The separate Section 103 rejection of claims 26-30 over Kadiyala, Shakesheff and Chen is traversed. Reconsideration and withdrawal of the rejections are requested.

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As noted in the remarks of record, tension in Kadiyala is created by a spring which is removed after contraction and is not present in the finished implant. It is not clear from the cited art or the Examiner's remarks where motivation exists in the cited art to have allegedly included an outer sheath to the implant of Kadiyala. The fact that Shakesheff may provide a device in a similar field with what the Examiner interprets as an outer sheath does not provide motivation in the art to have added an outer sheath to the device of Kadiyala. Even if Shakesheff and/or Chen would have made addition of an outer sheath to the device of Kadiyala obvious, the relationship of the core and outer sheath required by the presently claimed invention would not have been obvious from the combination of cited art.

Withdrawal of the Section 103 rejections is requested.

The Section 103 rejection of claim 22 over Kadiyala (U.S. Patent No. 6,174,333), Shakesheff (WO 02/47557), Chen (2000, Biomaterials, Vol. 21, pp 1541-1547) and Nyberg (1993, Biotechnology and Bioengineering, Vol. 41, pp 194-203) is traversed. Reconsideration and withdrawal of the rejection are requested as the deficiencies of the combination of Kadiyala, Shakesheff and Chen, such as are described above, are not cured by the teachings of Nyberg.

The claims are submitted to be in condition for allowance and a Notice to that effect is requested. The Examiner is requested to contact the undersigned, preferably by telephone, in the event anything further is required.

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Respectfully submitted,

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